

# Why Workforce Development Should Be Part of the Long-Term Care Quality Debate

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## Introduction

Since the Nursing Home Reform Act of 1987, public policy makers, consumers and providers have expressed growing interest in the quality of long-term care in nursing homes and other long-term care settings. The Nursing Home Reform Act, known as “OBRA 87,” transformed federal oversight of nursing home quality from its traditional emphasis on structure and process indicators to a focus on maintaining and improving resident outcomes. Since the passage of that landmark federal legislation, consumers, providers, regulators, insurers, and researchers have continuously struggled with how to define measure, assess and ensure long-term care quality.

The purpose of this paper is to introduce a largely overlooked feature of the long-term care system—direct-care workers—into the long term care quality debate. For the typical nursing home resident, direct-care staff—not nurses or doctors—provide eight out of every ten hours of the care they receive (McDonald, 1994). For home care clients, every hour of non-skilled nursing service is provided by paraprofessional workers. Our thesis is that the quality of long-term care—the recipients’ clinical and functional outcomes and quality of life—is significantly influenced by the attributes these workers bring to their caregiving jobs, the education and training they receive, and the quality of their jobs. The attitudes, values, skills and knowledge of these workers, how they are compensated and rewarded, and the way their jobs are organized and managed, all have a role to play in determining long-term care quality. Workforce development activities designed to increase the capacity of these individuals to participate effectively in long-term care settings should be integrated into all ongoing and new long-term care quality improvement and quality assurance initiatives.

- The paper addresses the following topics:
- The scope of federal quality initiatives to date;
- Why workforce development should be considered an important dimension of long-term care quality;
- The key policy and practice constraints that impede linking workforce development issues and long-term care quality;
- Examples of quality improvement initiatives that have incorporated workforce development activities; and,
- Applied research activities to examine the link between workforce development and long-term care quality.

## Federal Long-Term Care Quality Initiatives

Efforts to develop quality assurance mechanisms and health-related quality of care measures have been pursued more aggressively in the acute care sector than in long-term care (Kane, et al., 1998). While no consensus has emerged with respect to defining long-term care quality, to the extent that quality has been a focus, the nursing home model has dominated (Noelker and Harel, 2001). During the 1960s and 1970s, regulatory standards in response to perceived quality problems largely addressed structure and process issues (e.g., building safety, staffing levels).

In the early 1990s, as a result of OBRA 87, the federal government identified resident outcomes as a critical dimension of nursing home quality, and began to require nursing homes to report a standardized set of resident level data known as the Minimum Data Set (MDS). The quality indicators that evolved from the MDS are designed to capture clinical processes and outcomes such as the absence of restraints, prevalence of incontinence, decubitus ulcers, pain management and weight loss. For the last several years, the federal government has also required home health agencies to implement a survey—the “Outcome and Assessment Information Set” (OASIS)—to measure quality outcomes for adult recipients of Medicare-reimbursed home health services. The OASIS also focuses primarily on the clinical and technical aspects of care.

Not surprisingly, consumer advocates have tended to push federal regulators to define long-term care quality in terms of consumer protections that are intended to ensure resident/client rights and access to appropriate clinical interventions and quality living environments. For the most part, federal regulation of long-term care quality has not focused on the needs or concerns of frontline workers.

OBRA 87 did acknowledge the importance of nurse aides by mandating that they complete 75 hours of prescribed training and pass a competency exam to become certified to work in a Medicare or Medicaid reimbursed nursing home. The content of this training is generally focused on clinical skills and direct patient care tasks and has been criticized for not exposing entry level nurse aides to the communication, decision-making and problem-solving skills they will need to effectively interact with residents. (Direct Care Alliance, 2003). While states are free to add to these certification requirements, about half accept the federal requirement as sufficient (GAO, 2002). OBRA 87 reforms paid little attention to the continuing education needs of direct-care workers, other than to require 12 hours of in-service training per year to address areas of weakness for individual aides. According to the GAO Nurse Aide study, there is no documentation of whether and how facilities comply with federal in-service training requirements. Similar requirements were also applied to home health aides whose employers receive Medicare reimbursement. The qualifications and training requirements for individuals who work as personal care workers or home care aides are not regulated by the federal government, are typically minimal, and vary from state to state.

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## Social Components of Quality are Largely Missing from Federal Requirements

For many consumers and their families there is another dimension of long-term care, the “social side,” that is as important as the clinical aspects in evaluating the quality of care. Social outcomes of long-term care include life satisfaction, sense of autonomy and control, and the quality of relationships between residents/clients and caregivers. Indicators of these social components have proven much more difficult to develop and implement than clinical indicators—primarily because they are so sensitive to the needs and preferences of the individual recipient of long-term care. These social components, which together help to define quality of life outcomes, do not lend themselves easily to checklists and regulatory scrutiny. While of interest to many researchers, they have not yet captured the attention of policy makers. Kane, who has helped to pioneer the development of nursing home quality of life measures, argues that measuring quality of life is a relatively low priority in nursing homes because of the regulatory focus on markers of poor quality of care, a pervasive sense that nursing homes are powerless to influence quality of life, and impatience with research among those dedicated to culture change (Kane, 2003).

## The Case for Linking Workforce Development to Long-Term Care Quality

For purposes of this paper, workforce development is defined as all activities that increase the capacity of individuals to participate effectively in the workforce, thus improving worker performance. It includes activities related to pre-employment education, formal competency and credentialing requirements, recruitment and screening, compensation and benefit incentives, continuing education, and the organization and management of the workplace.

With the exception of entry-level certification requirements, the performance of the direct-care worker has usually been an afterthought in discussions of long-term care quality. However, there is some evidence that this may be changing. The latest Institute of Medicine (IOM) report on long-term care quality identifies workforce development as one of its nine guiding principles and acknowledges that “quality of (long-term) care depends largely on the performance of the caregiving workforce” (Wunderlich and Kohler, 2001). While most of the IOM discussion of workforce issues addressed the importance of achieving minimum staffing levels for nurses and direct-care workers, the report also emphasized that this is a necessary but not sufficient condition for positively affecting the quality of life and quality of care of nursing home residents. The report also identified education and training, supervision, environmental conditions, attitudes and values, job satisfaction and turnover of staff, salaries and benefits, leadership, management, and organizational capacity as other essential elements affecting quality of care.

The central importance of human interaction in long-term care is one of the major reasons why workforce development should be considered an important element of defining and measuring long-term care quality. The non-clinical aspects of long-term care, including assistance with very intimate activities of daily living—such as bathing, dressing and toileting—require a high degree of quite personal interaction between the direct-care worker and the care recipient. In the home setting, the worker may be one of the few, or only, sources of social engagement for the client. Furthermore, in addition to addressing clinical and functional concerns, the worker is often

attuned to the emotional and spiritual needs of the resident or client. Consequently, the quality of the interaction between the caregiver and care recipient will enhance or impede clinical, functional and quality of life outcomes.

Glass (1991) distinguishes “quality of caring” from “quality of care” and argues that the former is the key to quality of life in nursing homes. Applebaum and Phillips (1990) and Kane and colleagues (1994) have also emphasized the importance of the caregiver/client relationship in home care. Geron (2000) argues that for quality outcomes to be achieved in consumer-directed long-term care, the consumer (who undertakes the role of the employer in this model) must negotiate the terms of the relationship with the direct-care worker (her employee). Both, then, are responsible for the success of the interactions and the ultimate outcomes.

There is a dearth of empirical research linking the performance of direct care workers, and the factors that contribute to effective worker performance, with resident/client level quality of care and quality of life outcomes. Government interest in addressing workforce issues as part of the regulation of long-term care quality has been largely limited to analyzing whether there is a minimum nurse aide to nursing home resident ratio that must be achieved to deliver adequate care (CMS, 2000). Yet there is a growing body of evidence that suggests that other workforce issues are at least as important. A recent study of the not-for-profit nursing home industry in California found that almost all participating facilities had more than adequate staffing ratios (one nurse aide to 6 or 7 residents). In the view of administrators, supervisors and direct-care staff from these facilities, the largest obstacle to delivering high quality care was the need to constantly accommodate vacancies from staff turnover and a revolving door of new staff (Harahan, et al., 2003).

The problem of high turnover and vacancy rates among the nations’ long-term care providers is increasingly well documented. A study of turnover and vacancy rates conducted by the American Health Care Association reported that 52,000 certified nurse assistant (CNAs) positions are vacant nationwide, with annual nurse aide turnover rates exceeding 60 percent in 32 states, and exceeding 100 percent in 10 states (AHCA, 2003). Such turnover and vacancy rates among direct-care staff are generally typical across all long-term care settings and are clear indicators that many frontline workers are dissatisfied with their jobs.

Government and media reports suggest that the high turnover among nurse aides can negatively impact the quality of care and quality of life in nursing homes, assisted living and home care settings (GAO, 1999; IOM, 2000; Leon, 2001). Yet few studies have attempted to draw a direct link between workforce turnover and the quality of care received by long-term care recipients. A variety of researchers (Banaszak-Holl and Hines, 1996; Bowers et al. 2003 Brannon, et al., 1988; Leon, et al., 2001; and Tellis-Nayak, 1988) have examined factors that account for high turnover among direct-care workers. Not surprisingly, most of these studies found that economic conditions and the level of compensation influenced whether individuals stay in or leave their direct care jobs. However, several studies of turnover have singled out the relationship between direct care workers and supervisors as a significant factor in job retention. Bowers’ review of the nursing home literature identified empowerment of workers, respect between workers and supervisors, time to spend with residents, collaboration and participation in resident care decision-making, and organization of the work as important determinants of whether a nurse aide stays in or leaves her job—variables that do not necessarily require providers to find the resources to

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increase wages and benefits (Bowers, 2003). Several studies of home care workers (Feldman, 1994; Luz, 2001) also found that the relationship between supervisors and aides and the level of aide involvement in care decisions were significant predictors of job satisfaction and lower turnover rates.

In the past few years, researchers have begun to explore more directly the linkages between workforce turnover, workforce development and the clinical quality of long-term care. Eaton documented reductions in mortality, drug use and illness, and increases in resident functioning, and social activities after the introduction of innovative organizational models that emphasized improved working conditions for direct-care staff. These models included working with a full staff instead of the “short staffing” position so many nursing homes find themselves in, as well as an emphasis on working in teams, improved information sharing between nurses and direct-care staff, and enhanced responsibilities for direct care workers (Eaton, 2001). In their evaluation of the Wellspring nursing home quality improvement program, Stone and colleagues found that the intervention reduced nursing staff turnover, including direct-care workers, in comparison to a control group of facilities, and also showed reduced health deficiency citations on federally mandated surveys (Stone, et al., 2002). The Wellspring model includes a focus on both improving clinical competencies and an organizational change process that stresses the use of multidisciplinary resource teams empowered to develop and implement interventions that their members believe will improve quality of care for residents.

In Phase 2 of the CMS nursing home staffing study, researchers found a strong relationship between aide retention in California nursing homes and quality outcomes (CMS, 2002). For short-stay nursing home residents, the study found that retention rates affected electrolyte imbalance and urinary tract infection rates. Aide retention rates affected the functional status and pressure ulcer rates of long-stay residents.

Barry recently completed a study of the relationship between nurse aide empowerment strategies, staff turnover and resident health outcomes in a multi-state sample of nursing homes. She found that nursing homes where the charge nurse delegated more responsibility to aides experienced lower nurse aide turnover, although the impact on resident outcomes (as measured by risk-adjusted pressure ulcer incidence rates and Social Engagement scores taken from the Minimum Data Set) was not significant (Barry, 2002). Findings from this study also suggest that using turnover rates as a quality measure should be considered with caution. Barry found that facilities in her sample with a stable core staff of direct care workers and high turnover among a sub-set of workers, as a result of weeding out inappropriate hires, may produce better psychosocial outcomes than facilities with lower turnover.

## **Barriers to Integrating Workforce Development into Long-Term Care Quality Assessment and Improvement**

**T**he development of the long-term care workforce is not yet a priority in either the regulation of long-term care quality or in the development and implementation of quality improvement initiatives. Below we identify a variety of reasons why providers, policy makers, regulators and consumers may have been slow to accept the central role of workforce development in improving long-term care quality.

**1. Providers Lack Motivation to Invest In Their Workforce.** Third party reimbursement through Medicare and Medicaid creates the framework within which employers determine how much to invest in employing and training direct-care workers. Since the cost of training workers cannot be passed on to the consumers of long-term care in most cases, many providers appear reluctant to invest more in the orientation and continued training of their workers than the government requires. In addition, high turnover among the direct care workforce presumably discourages providers from emphasizing in-service training for fear that their workers will quickly leave for another job with a competing provider.

**2. Economic, Racial and Ethnic Differences between Workers and Employers.** The direct-care workforce is typically populated by low-income women who frequently are from a different ethnic and/or racial background than their supervisors, employers and recipients of care. Barriers of race and class may make it more difficult for providers to understand the needs and concerns of the direct-care workforce or how to turn their workers into high quality performers (Tellis-Nayak and Tellis-Nayak, 1989).

**3. The Hidden Nature of the Relationship between Clients and Workers.** Some of the most important responsibilities of direct-care workers involve an intimate relationship between consumer and caregiver—one that is typically hidden from regulators, supervisors and family members. What occurs inside more than a million nursing home rooms each day cannot possibly be monitored by harried nurses with multiple supervisory and clinical responsibilities. What occurs within the privacy of home care settings between client and caregiver is even more difficult to monitor, particularly when high proportions of those clients are cognitively impaired. This means that one of the most important dimensions that defines the quality of long-term care—the quality of the relationship between client and worker—is extremely difficult to identify measure and evaluate.

**4. Workers Lack A Voice.** Direct-care workers are rarely able to represent their interests to the public, to policy makers and regulators or their employers or to share information and experiences with each other. Few belong to worker associations that can formally give voice to their concerns and support their needs for information and training. This lack of a voice is exacerbated by the negative image many people have of the work that they do—work that is often perceived as unskilled and unpleasant, and perceived as provided by low-income women who have little opportunity or ability to do anything else. Providers, consumers, and policymakers, therefore, often do not recognize the central role of direct care workers in determining quality of care and quality of life.

**5. The Regulatory System Is Not Designed to Address Workforce Issues.** Direct-care workers are rarely interviewed during regulatory surveys to solicit their insights on quality issues. Anecdotal evidence, for example, indicates that many workers complain about the limited time they are allowed to interact with each resident. Yet, the survey process does not consider this issue in the quality oversight. Surveyors are not required to assess the quality of the work environment and job design as part of the survey process. Ironically, direct-care workers often bear the brunt of negative surveys and are viewed by many, including the mass media, as a major part of the quality problem.

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In addition, states Nurse Practice Acts regulate the degree to which nurses can delegate responsibilities to paraprofessionals under nurse supervision. These regulations tend to limit the ability of direct-care workers to undertake greater responsibilities, inadvertently limiting opportunities for empowerment and meaningful career ladders.

**6. Human Resource Management Expertise and Models of Successful Workforce Development are Limited.** Direct-care workers are managed by supervisors, usually nurses, who are largely trained as clinicians rather than human resource managers. In fact, federal law requires nursing homes and home health agencies to employ nurses as supervisors but does not address the management issues in training or certification requirements. Bowers (2000, 2003) has documented the negative feelings that many nurse aides express about the supervision they receive. Other studies have found that many long-term care nurses see themselves as clinicians rather than managers (Harahan, et al., 2003). In addition, most providers have been reluctant to invest in developing new ways of organizing, managing, and training their workers absent any information that such an investment will contribute to a more stable and committed workforce and a higher quality of long-term care for the consumer.

## Promising Practices

Fortunately, examples of promising workforce development activities are slowly increasing—perhaps spurred by the workforce shortages facing so many long-term care providers. Several comprehensive models of quality improvement that take account of workforce issues are emerging, including the Deep Culture Change initiatives within the Pioneer Network, the Eden Alternative and the Wellspring Quality Improvement Program in the nursing home arena and Cooperative Home Care Associates, the California Public Authority Model, and the Visiting Nurse Service of New York Learning Collaborative initiative in the home care arena. These models combine improvements in the clinical knowledge and technical skills of workers with organization and management interventions designed to reduce vacancies and turnover and improve job quality.

In addition to the above efforts, many long-term care providers are also experimenting with more discrete elements of workforce development. Such programs include the development and implementation of peer mentoring programs, career ladders, multidisciplinary teams, self-managed teams, as well as job redesign strategies that delegate more responsibility to direct-care staff and actively involve them in care planning and implementation. New programs are also emerging to train long-term care nurses to be supervisors by emphasizing coaching and mentoring rather than command and control strategies. (For a detailed description of these practices see the National Clearinghouse on the Direct-Care Workforce’s Provider Practice Data Base).

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## Understanding the Causal Links between a Quality Workforce and Quality of Care/Life Outcomes

Policy makers and providers need concrete examples of programs and models that successfully link workforce development and long-term care quality improvement to help them make worthwhile and sustainable investments. Currently, The Robert Wood Johnson Foundation and The Atlantic Philanthropies have joined together to fund a \$15 million demonstration and research program—Better Jobs, Better Care—to achieve two goals: (1) the implementation of policy and practice changes within five states (Iowa, North Carolina, Oregon, Pennsylvania, Vermont) designed to improve the quality of jobs of direct-care workers; and, (2) the generation of new knowledge through eight applied research and evaluation grants that advance the capacity of the long-term care industry to attract and retain a prepared, committed and sustainable workforce.

This national program will help us better understand the policy, practice and individual-level factors that contribute to quality jobs for direct-care workers and reduce high vacancy and turnover rates. But it will not, in and of itself, demonstrate the impact of workforce development on the quality of long-term care. Rather, understanding the causal links between workforce development and long-term care quality of life and quality of care will require a number of different strategies.

Policy makers, regulators, providers, consumer advocates and the media need to acknowledge the centrality of workforce performance in long-term care quality. The long-term care quality framework must then be broadened to include indicators of workforce quality, such as the attributes and attitudes of workers, the necessary clinical skills and competencies, appropriate communication and problem solving skills, workplace organizational structures and job design that support frontline workers, and the quality of the interactions and relationships between caregivers and care recipients. Specific measures must be developed, tested and refined.

New demonstration and evaluation initiatives should also be designed to assess a wide range of workforce development strategies and their impact on attracting and maintaining a quality workforce and improving quality of care and quality of life for long-term care recipients. The design of such demonstrations should involve researchers with expertise in organizational development, management and job redesign, as well as those skilled in measuring long-term care quality. These demonstrations must be multi-year, acknowledging that changes in quality outcomes can only be measured over a period of several years. They must also be multi-dimensional, acknowledging that workforce quality is determined by a wide range of factors and that no single intervention is likely to be effective. While we have a lot to learn from the natural experiments currently underway in many long-term care settings, the optimal (although most expensive) demonstration design would involve a randomized case-control study to test the effects of various workforce development strategies on care recipient quality outcomes.

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## Potential Demonstration Initiatives

New demonstration designs could involve a number of different approaches to test the impact of workforce development on quality of care and quality of life of long-term care recipients. At one end of the continuum, an experiment might be implemented involving a comprehensive approach to workforce development, a large network of participating providers and a randomized design that would permit the impact of the intervention to be compared to the status quo. A broad range of strategies to recruit, select, compensate, train, manage and supervise workers would be identified by researchers, providers and workers from the best available practices. The most promising set of practices would be incorporated into the intervention. The impact of the experiment would be measured using clinical outcomes derived from the Minimum Data Set, and other standardized clinical data quality of life measures as developed for CMS by Rosalie Kane and others as well as measures of workforce retention and job satisfaction, provider costs and measures of implementation burden.

At the other end of the continuum, the impact of interventions that deliberately incorporate workers in quality enforcement and quality assurance activities could be tested. For example, tools could be designed to permit nursing home surveyors to capture the perspectives of a random sample of nurse aides on quality problems in the facility, including the causes of the problems and steps needed to correct them. Plans of correction could then be devised that would take account of worker viewpoints. Comparative analyses of quality outcomes would be conducted to assess the effects of workers input into the quality assurance process.

Demonstrations could be devised that take advantage of the natural variation that exists in wages and benefits for nurse aides within and across particular market areas. High wage, high benefit facilities and agencies could be compared with low wage, low benefit facilities on workforce performance measures such as retention and job satisfaction, and quality of care, quality of life measures. Demonstrations could also be designed to test the quality and cost impacts of interventions that alter the management and supervisory strategies of the long-term care workplace to ensure that supervisors are able to model good care practices and empower nurse aides to make informed decisions about organizing and providing care.

In conclusion, quality assurance and quality improvement activities must recognize the importance of workforce development in long-term care. Given the labor intensive nature of the field, quality of care and quality of life for care recipients will not be achieved without focusing on the quality of their caregivers. We can begin by integrating a workforce development focus into long-term-care quality initiatives at the national and state levels through partnerships between Quality Improvement Organizations (QIOs), provider associations, worker groups and consumer organizations. The new Quality First initiative sponsored by the provider community offers another opportunity to emphasize the role of workforce development in quality. We also need to build an evidence base that demonstrates the links between a quality workforce and quality outcomes and identifies successful strategies for achieving both.

## References

- American Health Care Association. 2003. "Results of the 2002 AHCA Survey of Nursing Staff Vacancy and Turnover in Nursing Homes." 12 February. [http://www.ahca.org/research/rpt\\_vts2002\\_final.pdf](http://www.ahca.org/research/rpt_vts2002_final.pdf).
- Applebaum R. and Phillips, P.1990. Assuring the Quality of In-Home Care: The Other Challenge for Long-Term Care. *The Gerontologist*.
- Banaszak-Holl, J. and Hines, M.A.. 1996. "Factors Associated with Nursing Home Staff Turnover." *The Gerontologist* 36 (4): 512-17.
- Barry T. 2002. The Impact of Nurse Aide Empowerment Strategies on Nursing Home Resident Outcomes, unpublished doctoral dissertation. Pennsylvania State University.
- Bowers, B. J. 2003. "Recruitment and Retention Practices". Unpublished presentation to the California Association of Homes and Services for the Aging.
- Bowers, B.J. and Becker, M. 1992. "Nursing Assistants in Nursing Homes: The Relationship between Organization and Quality." *The Gerontologist* 32 (3): 360-66.
- Bowers, B.J. et al.2000. The Relationship Between Staffing and Quality in Long-Term Care Facilities, Exploring the Views of Nurse Aides. *Journal of Nursing Care Quality*. 14 (4).
- Brannon, D., Smyer, M.A., Cohn, M.D., Borchardt, L., Landry, J.A., Jay, G.M., Garfein, A.J., Malonebeach, E. and Walls, C. 1988 "A Job Diagnostic Survey of Nursing Home Caregivers: Implications for Job Redesign." *The Gerontologist* 28 (2): 246-52.
- Direct Care Alliance, Issue Brief 3.2003. A Poorly Trained Paraprofessional Workforce.
- Eaton, S.C. 2000. Beyond 'Unloving Care:' Linking Human Resources Management and Patient Care Quality in Nursing Homes. *Journal of Human Resource Management*.
- Feldman, P.H. 1994. "Dead-End Work or Motivating Job? Prospects for Frontline Paraprofessional Workers in Long-Term Care". *Generations*.
- GAO, Nurse Aide Training, OEI-05-00030., November 2002.
- GAO, 1999 Study of Assisted Living; Nursing Workforce: Recruitment and Retention of Nurses and Nurse Aides is a Growing Concern, GAO-01-750T
- Geron, S.M. 2000. The Quality of Consumer-Directed Long-Term Care. *Generations*.
- Glass, A.P. 1991. Nursing Home Quality: A Framework for Analysis. *Journal of Applied Gerontology*. 10(1), 5-18.
- Harahan, M. F., Kiefer, K., Burns Johnson, A., Guiliano, J., Bowers, B., and Stone, R.I. 2003. *Addressing Shortages in the Direct Care Workforce: The Recruitment and Retention Practices of California's Not-For-Profit Nursing Homes, Continuing Care Retirement Communities and Assisted Living Facilities*. California Association of Homes and Services for the Aging and The Institute for the Future of Aging Services.

- Leon, J., Marainen, J., and Marcotte, J. 2001. Pennsylvania's *Frontline Workers in Long-Term Care: The Provider Organization Perspective*. Jenkintown, PA: Polisher Geriatric Institute at the Philadelphia Geriatric Center.
- Luz, C. 2001. "Self-employed Caregivers: Their Motivations, Labor Conditions, and Patterns of Decision Making Related to work Selection and Tenure." Unpublished dissertation. University of Wisconsin - Milwaukee.
- Kane, R. A. 2003. Definition, Measurement and Correlates of Quality of Life in Nursing Homes: Toward a Reasonable Practice, Research and Policy Agenda. *The Gerontologist* 43: 28-36.
- Kane, R.A. et al. 1994. Perspectives on Home Care Quality. *Health Care Financing Review*.
- Kane, R.A., R. L. Kane., Ladd R.C. 1988. *The Heart of Long-Term Care*. New York: Oxford University Press.
- McDonald, C.A. 1994. "Recruitment, Retention and Recognition of Frontline Workers in Long-Term Care". *Generations: Vol. XVIII, No. 3*.
- Noelker, L.S. and Harel 2001. *Linking Quality of Life and Quality of Care in Long-term Care*. Springer Publishing Co.
- Report to Congress: Appropriateness of Minimum Nurse Staffing Ratios In Nursing Homes. 2000. Center for Medicare and Medicaid Services.
- Stone, R.I., Reinhard, S.C., Bowers, B., Zimmerman, D., Phillips, C., Hawes, C., Fielding, J., and Jacobson, N. 2002. *Evaluation of the Wellspring Model for Improving Nursing Home Quality*. The Commonwealth Fund.
- Tellis-Nayak, V. and Tellis-Nayak Mary. Quality of Care and the Burden of Two Cultures: When the World of the Nurse's Aide Enters the World of the Nursing Home. 1989. *The Gerontologist* 29 (3): 307-313.
- Tellis-Nayak, V and Tellis-Nayak, M. 1988. *Nursing Home Exemplars of Quality: Their Paths to Excellence*. Springfield, IL: Charles C. Thomas.
- Wunderlich G. S. 2000. *Improving the Quality of Long-Term Care*. The Institute of Medicine.
- Wunderlich G.S. and Kohler, P.O. 2001 *Committee on Improving Quality in Long-Term Care*. National Academy Press.

### Institute for the Future of Aging Services



The Institute for the Future of Aging Services, a policy research center within the American Association of Homes and Services for the Aging, was created in July 1999 to create a bridge among the policy, practice and research communities to advance the development of high-quality aging services.

IFAS provides a forum for the health, supportive services and housing communities to explore and develop policies and programs to meet the needs of an aging society.

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### Paraprofessional Health Care Institute



The Paraprofessional Healthcare Institute (PHI) focuses on strengthening the direct-care workforce within our nation's long-term care system through developing innovative recruitment, training, and supervisory approaches, client-centered caregiving environments, and effective public policy. PHI's work is guided by the belief that creating quality jobs for direct-care workers is essential to providing high-quality, cost-effective services to long-term care consumers.

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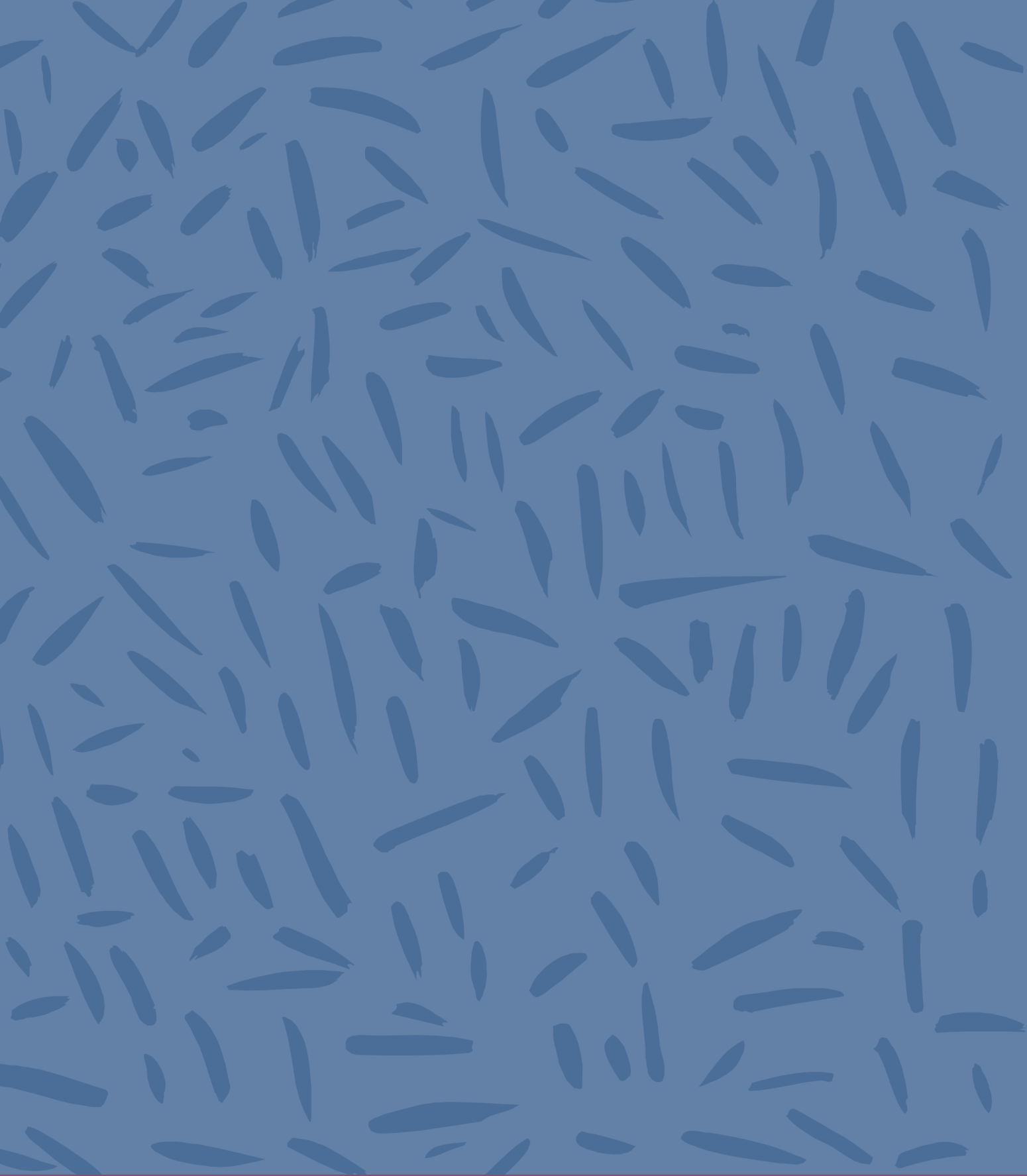
### American Association of Homes and Services for the Aging



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